

# Patent Claims

1. Method for performing communication on a bus .  
structured network between master device (AV1) and  
5 slave devices (AV2, PC, LSij, DSij) using a bi-  
directional data stream (DSA) for secure  
communication and a unidirectional data stream (DSI)  
for real-time communication, **characterized** in that  
the unidirectional data stream (DSI) is used for a  
10 certain type of secure communication (CIV, CIB)  
between a master device (AV1) and at least one slave  
device (AV2, PC, LSij, DSij).
2. Method according to claim 1, **characterized** in that  
15 said certain type of secure communication (CIV, CIB)  
is a control command (CIV, CIB).
3. Method according to claim 1 or 2, **characterized** in  
that said certain type of secure communication (CIV,  
20 CIB) is sent in a repeated manner.
4. Method according to one of claims 1-3, **characterized**  
in that disturbance on the communication network is  
detected, its degree is determined, and, depending on  
25 said degree of disturbance, the use of unidirectional  
data stream for secure communication is reduced.
5. Method according to one of claims 1-4, **characterized**  
in that secure communication information (CIV, CIB)  
30 which is to be issued by a slave device (AV2, PC,  
LSij, DSij) to several other devices (AV1, AV2, PC,  
LSij, DSij) is issued as secure communication  
information (DSA) to a master device (AV1) only,  
which transmits it as said certain type of secure

communication information (CIV, CIB) via  
unidirectional data stream (DSI) to the other devices  
(AV2, PC, LSij, DSij).

- 5 6. Method for a slave device for performing  
communication according to one of claims 1-5,  
**characterized** in that the slave device (AV2, PC,  
LSij, DSij), for retrieving said certain type of  
secure communication information (CIV, CIB), scans  
10 and decodes both, bidirectional data streams (DSA)  
and unidirectional data streams (DSI) received from  
said bus.
7. Method for a master device for performing  
15 communication according to one of claims 1-5,  
**characterized** in that the master device (AV1) sends  
certain type of secure information (CIV, CIB) to  
several slave devices (AV2, PC, DSij, LSij) on said  
bus using a unidirectional data stream (DSI).
- 20 8. Network, slave device or master device for performing  
the method according to one of claims 1-5, 1-6, or 1-  
5 and 7, respectively.